

## **Amendments to the Claims**

The following listing will replace all previous listings of the claims:

1-104. (CANCELED)

105. (CURRENTLY AMENDED) A method ~~of selecting a dose of an anti-oxidant composition for administration to a human, the method~~ comprising

assessing occurrence in ~~the a~~ human's genome of a quantity of a disorder-associated ~~polymorphisms polymorphism~~ in each of two genes, the genes consisting of a superoxide dismutase gene and ~~[[in]]~~ a catalase gene ~~of the human,~~  
whereby each occurrence of a disorder associated polymorphism in each gene indicates an increased susceptibility of the human to a pathology involving oxidative damage to the human, relative to a human with fewer or no disorder associated polymorphisms.

106-109 (CANCELED)

110. (NEW) A method comprising

assessing a relative degree to which a human is susceptible to an undesirable oxidative stress condition by identifying a polymorphism in each of

a gene encoding a superoxide dismutase, and

a gene encoding a catalase,

the polymorphism identified as correlated with exhibition by a human of any pathology,

thereafter calculating a susceptibility value for the condition by either

summing the identified polymorphisms to yield a value for the human, or

assigning a weighting factor to each polymorphism and then summing the weighting

factors to yield a value for the human,

wherein a value for the human greater than a value for a control indicates a greater susceptibility to the oxidative stress condition for the human,

the method hereby assessing the degree to which the human is susceptible to the undesirable oxidative stress condition relative to a human with fewer or no disorder associated polymorphisms in these two genes.

111. (NEW) A method comprising

assessing occurrence in a human's genome of a quantity of a disorder-associated polymorphism in each of two genes, the genes consisting of a superoxide dismutase gene and a catalase gene,  
whereby each occurrence of a disorder associated polymorphism in each gene indicates an increased susceptibility of the human to a pathology involving oxidative damage relative to another human with

fewer or no disorder associated polymorphisms, and thus a desirability to administer an antioxidant composition or an increased dose of an anti-oxidant composition to the human.